

Detailed Action

1. Claims 1-2, 5-6, 8, 10-11, 13-15, 17, 20-23, 25-29, and 31-36 are pending.

Claim Rejections - 35 USC § 112

2. Claims 1, 5, 10, 14, 20, and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. **Claims 1, 5, 10, 14, 20, and 26** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The subject matter of ..."wherein the reminder event is associated with an activity that takes place at a particular time" may be inherent to one skilled in the art at the time of the invention (the purpose of a reminder), however the subject matter wherein ..."the control signal configured to cause the actuator to output a first haptic effect directly to the housing based on the particular time of the reminder event"... is seen as new matter since this subject matter is neither inherent or found within the specification of the current application. The closest to this subject matter is an example given discussing a user "Bob" who assigned particular haptic effects

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according to the event reminder and NOT the time of the reminder. One example describes wherein a fourth haptic event is assigned to occur fifteen minutes before the time entry of the calendar. However, the fourth haptic effect is due to the fact that the event is a calendar event and not because the event is occurring 15 minutes before the time entry.

The above disclosed new matter is specifically cited from claim 1 however; claims 5, 10, 14, 20, and 26 all contain the new matter. The new matter is removed from the rejection below.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

... a signal does not fall within one of the four statutory classes of Sec. 101.

... signal claims are ineligible for patent protection because they do not fall within any of the four

statutory classes of Sec. 101.

Claim(s) 10 and 14 is/are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 23 is drawn to functional descriptive material recorded on a computer usable medium. Normally, the claim would be statutory. However, the specification does not specifically define or exemplify the claimed computer readable medium, such examples would be defining the medium as encompassing statutory media such as a “ROM”, “hard drive”, “optical drive”, etc, as well as ***non-statutory*** subject matter such as a “signal” or computer code.

“A transitory, propagating signal ... is not a “process, machine, manufacture, or composition of matter.” Those four categories define the explicit scope and reach of subject matter patentable under 35 U.S.C. § 101; thus, such a signal cannot be patentable subject matter.” (*In re Petrus A.C.M. Nuijten*; Fed Cir, 2006-1371, 9/20/2007).

Because the full scope of the claim as properly read in light of the disclosure appears to encompass non-statutory subject matter (i.e., because the specification defines/exemplifies a computer readable medium as a non-statutory signal, carrier waver, etc.) the claim as a whole is non-statutory. The examiner suggests amending the claim to include the disclosed tangible computer readable medium, while at the same time excluding the intangible transitory media such as signals, carrier waves, code, etc. Any amendment to the claim should be commensurate with its

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corresponding disclosure. The examiner suggests amending the preamble to include "A non-transitory computer-readable medium which causes a data processing system to:..."

The examiner would like to note that the Patent Office has recently reevaluated the current stance regarding 35 U.S.C. 101 and the subject matter covered therein. This change occurred after the submission of the previous office action filed 1/6/2010. To overcome this rejection is it suggested to amend the claim as suggested above and if any further questions persist to contact the examiner at the below identified number to set up an interview.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 10-11, 13, 20-23, and 25, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Rosenberg et al.** (US Patent 7,148,875), herein after referred to as Rosenberg, in view of **Shahoian et al.** (US Patent Application Publication 2002/0033795), herein after referred to as Shahoian

Regarding independent **claim 1**, Rosenberg discloses a method, comprising: receiving an input signal associated with a reminder event (*column 13 lines 30-48 reference event occurring within the environment such as an appointment reminder*) at a handheld communication device that includes a housing and a user interface member (*figure 8a and 8b reference housing 88 and user interface 82 of hand held device 80*), wherein the reminder event is associated with an activity that takes place at a particular time (*column 13 lines 30-48 reference event occurring within the environment such as an appointment reminder*);

determining a type of the reminder event (*again column 13 lines 30-48 reference event occurring within the environment such as an appointment reminder wherein specific force sensations are brought about to differentiate different events or characteristics of events such as particular users or priority of an event wherein a priority of an event is determining a type of the reminder event*); and

outputting a control signal to an actuator that is coupled to a housing of the handheld communication device (*figure 8a and 8b reference 86 coupled to housing via springs 90 or in greater detail via springs 62 shown in figure 6 from actuator 66*), the control signal configured to cause the actuator to output a haptic effect to the housing on the type of reminder event (*column 14 lines 30-48 disclose wherein the force sensations can be modified to signify different events of the same type wherein one kind of event is disclosed as an appointment reminder wherein the priority of an event can dictate the type of force sensation disclosed hence a second or more haptic effect associated with the type of the reminder event*).

Rosenberg does not specifically disclose wherein a first haptic effect directly to the housing thereby imparting the first haptic effect substantially to the housing rather than the user interface member since the haptic effect upon the housing is a bi-product via the springs when the haptic effect is substantially affecting the user interface member 16 as shown in figure 6.

Shahoian discloses that the actuator assembly may be coupled to any of various locations of a device housing and used to vibrate parts of the housing relying on the transmission of vibrations through the product housing (*paragraph [0093]*).

It would have been obvious to one skilled in the art at the time of the invention that Rosenberg's device could include additional actuators or that the first actuator claimed could be mounted on the housing to transmit a haptic effect directly to the housing without the effect becoming "faint or muddy" to the user since the haptic effect is propagating directly to the housing as disclosed by Shahoian (*paragraphs [0093]-[0096]*).

Regarding **claim 2**, Rosenberg discloses a method wherein the reminder event includes one of an appointment, a meeting, and a pre-scheduled activity (*column 13 lines 30-48 reference event occurring within the environment such as an appointment reminder*).

Regarding **independent claim 10**, Rosenberg discloses a computer-readable medium containing executable instructions when executed cause a data processing system to (*column 6 lines 14-62 which*

describes circuitry that enables the touch pad to operate correctly which is inherent to have program code to operate the circuitry): receive an input signal associated with a reminder event at a hand held communication device (column 13 lines 30-48 reference event occurring within the environment such as an appointment reminder, figures 8a and 8b reference hand held device 80) that includes a housing and a user interface member (figures 8a and 8b reference housing 88 and user interface member 82), wherein the reminder event is associated with an activity that takes place at a particular time (column 13 lines 30-48 reference event occurring within the environment such as an appointment reminder);

determine a type of the reminder event (again column 13 lines 30-48 reference event occurring within the environment such as an appointment reminder wherein specific force sensations are brought about to differentiate different events or characteristics of events such as particular users or priority of an event wherein a priority of an event is determining a type of the reminder event); and

output a control signal to an actuator that is coupled to the housing of the handheld communication device (figure 8a and 8b reference 86 coupled to housing via springs 90 or in greater detail via springs 62 shown in figure 6 from actuator 66), the control signal configured to cause the actuator to output a haptic effect to the housing based on the type of reminder event (column 13 lines 30-48 reference signified using a vibration) and a haptic effect associated with the type of the reminder event (column 14 lines 30-48 disclose wherein the force sensations can be modified to signify different events of the same type wherein one kind of event is disclosed as an appointment reminder wherein the priority of an event can

dictate the type of force sensation disclosed hence a second or more haptic effect associated with the type of the reminder event).

Rosenberg does not specifically disclose wherein a first haptic effect directly to the housing thereby imparting the first haptic effect substantially to the housing rather than the user interface member since the haptic effect upon the housing is a bi-product via the springs when the haptic effect is substantially affecting the user interface member 16 as shown in figure 6.

Shahoian discloses that the actuator assembly may be coupled to any of various locations of a device housing and used to vibrate parts of the housing relying on the transmission of vibrations through the product housing (*paragraph [0093]*).

It would have been obvious to one skilled in the art at the time of the invention that Rosenberg's device could include additional actuators or that the first actuator claimed could be mounted on the housing to transmit a haptic effect directly to the housing without the effect becoming "faint or muddy" to the user since the haptic effect is propagating directly to the housing as disclosed by Shahoian (*paragraphs [0093]-[0096]*).

Regarding **claim 11**, Rosenberg discloses a computer-readable medium wherein the reminder event includes one of an appointment (*column 13 lines 30-48 reference event occurring within the environment such as an appointment reminder*), a meeting, and a pre-scheduled activity.

Regarding **claim 13**, Rosenberg discloses a computer-readable medium further comprising generating a plurality of control signals, each control signal being associated with a haptic effect (*column 13 lines 30-48 reference wherein the force sensation/control signal can vary to signify different events of the same type, including different frequencies or pulses*).

Regarding **independent claim 20**, Rosenberg discloses an apparatus, comprising:

a housing; a user interface member; a processor; and an actuator coupled to the housing and in communication with the processor, (*figure 8a reference actuator 86 within the body and column 6 lines 14-62 which discloses a microprocessor figures 8a and 8b reference housing 88 and user interface 82*) wherein the processor is configured to:

receive an input signal associated with a reminder event (*column 13 lines 30-48 reference event occurring within the environment such as an appointment reminder*), wherein the reminder event is associated with an activity that takes place at a particular time (*column 13 lines 30-48 reference event occurring within the environment such as an appointment reminder*);

determine a type of the reminder event (*again column 13 lines 30-48 reference event occurring within the environment such as an appointment reminder wherein specific force sensations are brought about to differentiate different events or characteristics of events such as particular users or priority of an event wherein a priority of an event is determining a type of the reminder event*); and

output a control signal to the actuator, the control signal configured to cause the actuator to output a first haptic effect to the housing based on

the type of the reminder event (*column 14 lines 30-48 disclose wherein the force sensations can be modified to signify different events of the same type wherein one kind of event is disclosed as an appointment reminder wherein the priority of an event can dictate the type of force sensation disclosed hence a second or more haptic effect associated with the type of the reminder event*).

Rosenberg does not specifically disclose wherein a first haptic effect directly to the housing thereby imparting the first haptic effect substantially to the housing rather than the user interface member since the haptic effect upon the housing is a bi-product via the springs when the haptic effect is substantially affecting the user interface member 16 as shown in figure 6.

Shahoian discloses that the actuator assembly may be coupled to any of various locations of a device housing and used to vibrate parts of the housing relying on the transmission of vibrations through the product housing (*paragraph [0093]*).

It would have been obvious to one skilled in the art at the time of the invention that Rosenberg's device could include additional actuators or that the first actuator claimed could be mounted on the housing to transmit a haptic effect directly to the housing without the effect becoming "faint or muddy" to the user since the haptic effect is propagating directly to the housing as disclosed by Shahoian (*paragraphs [0093]-[0096]*).

Regarding **claim 21**, Rosenberg discloses an apparatus wherein the body is included in a handheld communication device (*figure 8 reference pda*).

Regarding **claim 22**, Rosenberg discloses an apparatus wherein the handheld communication device includes one of a cellular phone, a satellite phone, a cordless phone, a personal digital assistant (*figure 8 reference pda*), a pager, a two-way radio, a portable computer, a game console controller, a personal gaming device, and an MP3 player.

Regarding **claim 23**, Rosenberg discloses an apparatus wherein the type of the reminder event includes one of an appointment (*column 13 lines 30-48 reference event occurring within the environment such as an appointment reminder*), a meeting, and a pre-scheduled activity.

Regarding **claim 25**, Rosenberg discloses an apparatus further comprising memory that stores a haptic lookup table, the first haptic effect being based on the haptic lookup table (*column 13 lines 30-48 reference wherein the force sensation/control signal can vary to signify different events of the same type*).

Such organizations of data do not emphasize any significance as what would be the benefit from applying such organization. Therefor, the examiner asserts that such values are based on the design of device and provide no specific improvements.

5. **Claims 31-36** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Rosenberg - Shahoian** in view of **Kaaresoja et al.** (US

Patent Application Publication 2002/0177471), herein after referred to as Kaaresoja.

Regarding **claims 31-36**, Rosenberg discloses a method of using haptic effects.

Rosenberg does not specifically disclose wherein a first haptic effect is used for a source and a second haptic effect is used for a type of event but Rosenberg does disclose differentiating (*column 13 lines 30-48 disclose "different frequency can each be used to differentiate...different characteristics of events)* between sources of events (*column 13 lines 30-48 disclose "different frequency can each be used to differentiate different events)* nor that a portion of the first haptic effect and the second haptic effect are output at a same time configured by a control signal.

One skilled in the art at the time of the invention would understand that a vibration of different frequencies is a haptic effect with a plurality of different haptic effects in series wherein one part of the vibration comprises portions of the plurality of haptic effects due to resonance of a haptic effect within the device.

Further it would have been obvious to one skilled in the art at the time of the invention that Rosenberg may vary the frequency to both differentiating different events and different characteristics of event to provide a user with additional details without needing to look at the device without modification to the invention as disclosed by Rosenberg (*column 13 lines 30-48*).

Kaaresoja discloses vibration patterns for haptic effects which including turning on and off haptic actuators to create a vibration pattern composed of multiple haptic effects (*figure 3 and paragraph [0034]*).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. **Claims 5-6, 8, 14-15, 17, and 26-29** are rejected under 35

U.S.C. 102(e) as being anticipated over **Rosenberg**.

Regarding **independent claim 5**, Rosenberg discloses a method, comprising: receiving an input signal associated with a status event (*column 13 lines 30-48 reference event occurring within the environment such as an appointment reminder*) at a handheld communication device (*figures 8a and 8b reference hand held device 80*);

determining a type of the status event (*again column 13 lines 30-48 reference event occurring within the environment such as an receipt of email wherein specific force sensations are brought about to differentiate different events or characteristics of events such as particular users sending email*); and

outputting a control signal to an actuator (*figure 8a reference 86*), wherein the actuator is coupled to a housing of the handheld communication device (*figure 8a and 8b reference 86 coupled to housing via springs 90 or in greater detail via springs 62 shown in figure 6 from actuator 66*), and wherein the control signal includes a haptic code programmed to cause the actuator to output at a presubscribed time after receiving the input signal a haptic effect associated with the source of the status event (*column 13 lines 30-48 reference signified using a vibration which occurs at a prescribed time after receiving an input processed by a controller wherein the controller send out haptic code programmed to output a haptic effect at a prescribed time*) and output a first haptic effect to the housing based on the type of the status event (*column 14 lines 30-48 disclose wherein the force sensations can be modified to signify different events of the same type wherein one kind of event is disclosed as receipt of email wherein the particular user sending the email can dictate the type of force sensation used hence a second or more haptic effect associated with the source of the status event; further as described above in claim 1 transmission of haptic effects to the housing are a bi-product of vibrations via the springs when the haptic effect is substantially affecting the user interface member 16 as shown in figure 6 however since no such subject matter of substantially or directly exist within claim 5, Rosenberg discloses a haptic effect to the housing*).

Regarding **claim 6**, Rosenberg discloses a method wherein the status event includes one of an advertisement event, a business-transaction event, a one-to-one marketing event, a stock-trading event, a weather-forecast event, an entertainment event (*column 13 lines 30-48*

reference explosion in a game wherein games are normally entertainment events), a sports event, and an emergency event.

Regarding **claim 8**, Rosenberg discloses a method further comprising extracting a haptic code from the input signal, the control signal being based at least in part on the haptic code (*figure 8 reference 86 and column 16 lines 46-55 and column 13 lines 30-48 wherein the actuator provides the vibration based on events wherein code is used to signify an event and output the vibration*).

Regarding **independent claim 14**, Rosenberg discloses a computer-readable medium containing executable instructions when executed cause a data processing system to (*column 6 lines 14-62 which describes circuitry that enables the touch pad to operate correctly which is inherent to have program code to operate the circuitry*):

receive an input signal associated with a status event at a handheld communication device (*column 13 lines 30-48 reference event occurring within the environment such as an appointment reminder figure 8a reference handheld device 80*);

determine a type of the status event (*again column 13 lines 30-48 reference event occurring within the environment such as an receipt of email wherein specific force sensations are brought about to differentiate different events or characteristics of events such as particular users sending email*); and

output a control signal to an actuator (*figure 8a reference 86*), wherein the actuator is coupled to a housing of the handheld communication device (*figure 8a and 8b reference 86 coupled to housing via springs 90 or in greater detail via springs 62 shown in figure 6 from actuator 66*), and wherein the control

signal includes a haptic code programmed to cause the actuator to output a at a prescribed time after receiving the input signal (*column 13 lines 30-48 reference signified using a vibration which occurs at a prescribed time after receiving an input processed by a controller wherein the controller send out haptic code programmed to output a haptic effect at a prescribed time*) a first haptic effect to the housing based on the type of the status event (*column 14 lines 30-48 disclose wherein the force sensations can be modified to signify different events of the same type wherein one kind of event is disclosed as receipt of email wherein the particular user sending the email can dictate the type of force sensation used hence a second or more haptic effect associated with the source of the status event; further as described above in claim 1 transmission of haptic effects to the housing are a bi-product of vibrations via the springs when the haptic effect is substantially affecting the user interface member 16 as shown in figure 6 however since no such subject matter of substantially or directly exist within claim 5, Rosenberg discloses a haptic effect to the housing*).

Regarding **claim 15**, Rosenberg discloses a computer-readable medium wherein the status event includes one of an advertisement event, a business-transaction event, a one-to-one marketing event, a stock-trading event, a weather-forecast event, an entertainment event (*column 13 lines 30-48 reference explosion in a game wherein games are normally entertainment events*), a sports event, and an emergency event.

Regarding **claim 17**, Rosenberg discloses a computer-readable medium, wherein the instructions when executed further cause the data processing system to extract a haptic code from the input signal, the control signal being based at least in part on the haptic code (*figure 8 reference 86 and column 16 lines 46-55 and column 13 lines 30-48 wherein the actuator*

provides the vibration based on events wherein code is used to signify an event and output the vibration).

Regarding **independent claim 26**, Rosenberg discloses an apparatus, comprising: a housing; a user interface member; a processor; and an actuator coupled to the housing and in communication with the processor (*figure 8a reference actuator 86 within the body and column 6 lines 14-62 which discloses a microprocessor and figures 8a and 8b reference housing 88 and user interface member 82*) wherein the processor is configured to:

receive an input signal associated with a status event at the apparatus (*column 13 lines 30-48 reference event occurring within the environment such as an appointment reminder*);

determine a type of the status event (*again column 13 lines 30-48 reference event occurring within the environment such as an receipt of email wherein specific force sensations are brought about to differentiate different events or characteristics of events such as particular users sending email*); and

output a control signal to the, and wherein the control signal includes haptic code programmed to cause the actuator to output at a prescribed time after receiving the input signal (*column 13 lines 30-48 reference signified using a vibration which occurs at a prescribed time after receiving an input processed by a controller wherein the controller send out haptic code programmed to output a haptic effect at a prescribed time*) a first haptic effect to the housing based on the type of the status event (*column 14 lines 30-48 disclose wherein the force sensations can be modified to signify different events of the same type wherein one kind of event is disclosed as receipt of email wherein the particular user sending the*

email can dictate the type of force sensation used hence a second or more haptic effect associated with the source of the status event; further as described above in claim 1 transmission of haptic effects to the housing are a bi-product of vibrations via the springs when the haptic effect is substantially affecting the user interface member 16 as shown in figure 6 however since no such subject matter of substantially or directly exist within claim 5, Rosenberg discloses a haptic effect to the housing).

Regarding **claim 27**, Rosenberg discloses an apparatus wherein the apparatus includes is a handheld communication device (*figure 8 reference pda*).

Regarding **claim 28**, Rosenberg discloses an apparatus wherein the handheld communication device includes one of a cellular phone, a satellite phone, a cordless phone, a personal digital assistant (*figure 8 reference pda*), a pager, a two-way radio, a portable computer, a game console controller, a personal gaming device, and an MP3 player.

Regarding **claim 29**, Rosenberg discloses an apparatus wherein the status event includes one of an advertisement event, a business-transaction event, a one-to-one marketing event, a stock-trading event, a weather-forecast event, an entertainment event (*column 13 lines 30-48 reference explosion in a game wherein games are normally entertainment events*), a sports event, and an emergency event.

Response to Arguments

8. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment. This action is **final**.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER

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E. LEIBY whose telephone number is (571)270-3142. The examiner can normally be reached on 9 - 5 Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on 571-272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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June 1st, 2010

/Henry N Tran/
Primary Examiner, Art Unit 2629